

IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION

OLLIE GREENE, Individually as the §  
Surviving Parent of WYNDELL GREENE, §  
SR., et al., § CASE NO.: 3:11-CV-00207-N  
§  
Plaintiffs, §  
vs. § JURY TRIAL DEMANDED  
§  
TOYOTA MOTOR CORPORATION §  
et al., §  
§  
Defendants. §

**DEFENDANT VOLVO GROUP NORTH AMERICA, LLC'S  
REPLY IN SUPPORT OF ITS MOTION TO EXCLUDE THE REPORT,  
TESTIMONY AND EVIDENCE OF PLAINTIFFS' EXPERT KEITH FRIEDMAN**

Defendant VOLVO GROUP NORTH AMERICA, LLC ("VGNA") files this reply brief in support of its Motion to Exclude the Report, Testimony and Evidence of Plaintiffs' Expert Keith Friedman (Docket #463), respectfully showing:

**I. INTRODUCTION**

Keith Friedman's report relating to the plaintiffs' claims against VGNA was nothing more than a literature review coupled with some *ipse dixit* opinions. That report provided no underlying calculations, no testing or modeling results, no analyses, and no alternative designs or applications of the general research cited to the facts of this case. Both in and since his deposition, Friedman offered little more actual support, analysis or methodology – despite belatedly producing two clearly unreliable and irrelevant "tests" or "models." VGNA has moved to exclude Friedman's opinions because they fell far below the standards required by FRE 702 and *Daubert* for the admission of expert testimony.

In their response to VGNA’s motion to exclude, Plaintiffs now offer a 22-page affidavit from Friedman that merely repeats vague, sweeping and conclusory statements regarding Friedman’s supposed qualifications and the “methodology” for his opinions – but do nothing to actually *show* the Court that Friedman is qualified to testify about the Volvo tractor or that his methods (if, indeed, he really employed any methodology at all) and resulting opinions are either reliable or relevant. Plaintiffs and Friedman spend considerable time and paper *saying* that he is qualified, *saying* that his methods and opinions are reliable and relevant, and *saying* that he “tested” or “modeled” his theories and using *Daubert*-sounding buzz words and phrases such as “system analysis methodology,” “simulation,” “baseline,” and “consistent with the methodological approach.” But, a careful reading of the response and affidavit reveals that they do nothing to *prove* that Friedman is qualified or that his opinions are either reliable or relevant.

Plaintiffs have had over three years and repeated opportunities to satisfy the requirements of FRE 702 and *Daubert*. They have failed to do so. Friedman’s report and testimony should be excluded.

## **II. ARGUMENTS AND AUTHORITIES**

### **A. Friedman’s Lack of Relevant Qualifications.**

Plaintiffs’ response and Friedman’s supporting affidavit underscore Friedman’s lack of expertise in fields relevant to the Volvo tractor. Rather than provide any specific references to the relevant areas – heavy truck front-end design; heavy truck energy absorption and crash compatibility; “radar systems” that are supposedly at issue in this suit (CWS, ACC and AdvBS); and heavy truck disc and drum brakes – Plaintiffs repeat (in a cookie-cutter affidavit that parallels ones that Friedman signed in conjunction with other motions to exclude) a long list of irrelevant or unrelated experience apparently believing that any experience at all relating to

motor vehicles somehow qualifies Friedman to testify about heavy trucks, collision warning systems, adaptive cruise control, or brakes.

With regard to braking, the only references contained in Friedman's affidavit are to "regenerative braking, electronic stability control brakes and anti-lock brakes." Friedman Aff. (Docket #567) at ¶9(m) (APP 0365). He failed to identify any experience whatsoever with either disc brakes or drum brakes on heavy trucks – the two types of brakes he opines upon in his report. *See id.* This is on top of Friedman's admission that he is not an expert in the area of heavy truck brake design. Friedman Depo Tr. (Docket #465) at 565:10-18 (APP 0134).

**B. Friedman's Belated and Irrelevant "Testing" and "Computer Models."**

In his report, Friedman did not refer at all to any "testing" or "computer modeling" regarding the Volvo tractor. Instead, the first mention of any such testing or modeling for this case came up midway through his deposition. Plaintiffs' argument that it would have been easy for VGNA's counsel to question Friedman about his "computer models" is absurd – particularly because they did not timely disclose or produce any such testing or modeling and *still* have not produced a complete copy of the underlying input files.

More importantly, the scant information that has been produced to date shows that Friedman has never actually "tested" any of his unspecified alternative designs. Instead, Plaintiffs' use of the term "alternative design approach" appears to be a euphemism to suggest that Friedman has actually modeled the alleged alternative designs. But, there is no frontal underride protection device ("FUPD") or "airbag collision mitigation system" contained in the "testing" and "modeling" materials that have been produced to date by Plaintiffs and Friedman. This alone renders Friedman's opinions regarding such matters both unreliable and irrelevant.

Neither Friedman's report, his deposition testimony, nor his 22-page affidavit set forth any of the bases for Friedman's alleged computer testing and/or modeling. Instead, Friedman baldly avers that he created "substantially similar models" of the front end of the Volvo and the rear of the 4Runner, but has still not provided any detail or support for this assertion. *See* Friedman Aff. (Docket #567-5) at ¶15 (APP 0367) Moreover, Friedman claims to have "modified the front end of the Volvo" to rerun the simulation to evaluate the "alternative design approach," but has still not disclosed *what* modifications were supposedly made. *Id.* Whatever these modifications are – we still don't know – they are clearly not an alternative design of either a "FUPD" or an "airbag collision mitigation system."

Finally, in his affidavit Friedman cites to SAE Paper 890382, "*Live Subject Safety Research*" (a paper co-written by his father, Donald Friedman), for the proposition that his methodology is well-accepted. Friedman Aff. (Docket #567) at ¶16 (APP 0368) This SAE paper was not even mentioned in his report, was not discussed in his deposition, and was not included in the 17 boxes of materials he produced halfway through his deposition. In fact, the paper (which VGNA has since purchased) discusses passenger vehicle occupant injuries in side and rollover impacts – not frontal collisions involving heavy trucks with SUV's similar to a 4Runner. Even assuming the paper sets forth an acceptable methodology, which it does not, Friedman did not attempt to follow that methodology here – he merely says that he did. *Ipse dixit.*

### **C. Friedman's Energy-Absorption Opinions.**

Plaintiffs' response regarding energy-absorption features sidesteps the *Daubert* analysis. Rather than responding to VGNA's argument that Friedman failed to identify a specific energy-absorption design or perform any testing, calculations or otherwise do anything specific to the

facts of this case, Plaintiffs cite testimony that VGNA did not have energy-absorbing technology on the front of the vehicle and cite papers and general research on *underride* protection devices. While Plaintiffs correctly state that they have the burden of proof to identify a safer alternative design that would have prevented the Greene family's injuries and deaths, Friedman has never provided any specific alternative designs nor has he offered any calculations, testing, models or even estimations on how these "alternative design approaches" would have changed the subject accident or prevented the Greene family's injuries. The failure to present a specific design or an "end product" is proper grounds to exclude expert testimony. *Guy v. Crown Equip. Corp.*, 394 F.3d 320, 327 (5th Cir. 2004). Moreover, it is not enough for an expert to testify that his hypothetical alternative design would, in some respects, have better performance than the subject vehicle. Instead, to provide relevant testimony, an expert must also establish that his hypothetical design would have resulted in greater safety *in the accident at issue*. *Zaremba v. Gen. Motors Corp.*, 360 F.3d 355, 359 (2d Cir. 2004).

#### **D. Friedman's "Radar System" Opinions.**

In their response, Plaintiffs cite Friedman's report – written two months before his deposition – as evidence that he did not abandon either a collision warning system (CWS) or advanced braking system (AdvBS) as his would-be alternative design for his "radar systems" theory. (As VGNA has previously noted, Plaintiffs have not alleged that the Volvo tractor was defective due to an "absent or defective radar system." Their complaint specifically refers to – and has always referred to – an "absent or defective collision warning system." *See* Plaintiffs' Second Am. Complaint (Docket #113) at ¶58. Not all "radar systems" are "collision warning systems.") But, because Friedman provided nothing more than a passing reference and general description of three types of "radar systems" in his report, during Friedman's deposition

VGNA's counsel asked him to specifically identify what "radar system" he was offering as an alternative design. Friedman responded: "The alternative design I'm proposing is an adaptive cruise control." Friedman Depo Tr. (Docket #465) at 326:23-24 (APP 0116) To the extent Friedman ever specifically offered CWS or AdvBS as an proposed alternative design – a proposition that is dubious – he had clearly abandoned both CWS and AdvBS as proposed alternatives by the time of his deposition. To this day – whether in his report, his deposition, or now in his affidavit – Friedman has never offered or produced any calculations, testing, modeling, analysis or other underlying support for how CWS or AdvBS would have performed in this accident. And, as Friedman acknowledged in his own deposition, adaptive cruise control (ACC) is not a "collision warning system" – so any testimony or belated calculations he has regarding ACC is irrelevant to any theory of defect that has actually been pleaded. *See* Friedman Depo Tr. (Docket #465) at 323:2-19 & 337:24-338:6 (APP 0116 & 0119)

Finally, in response to VGNA's proof that Friedman simply concocted certain variables used in his surprise ACC "calculations" – that is, that Friedman essentially made up a driver perception and response time in order to manipulate his "formula" and results – Plaintiffs have raised a bogus "battle of the experts" argument. *See* Plaintiffs' Response (Docket #561) at p. 27. But Friedman did not simply misapply an acceptable methodology and come to a different conclusion than VGNA's CWS expert, Tim Cheek, and all of the relevant literature (including the manufacturers' specifications). Friedman simply *made stuff up* in an effort to support his *ipse dixit* conclusion. "[A]ny step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology." *In re Paoli R.R. Yard PCB Litig.*,

35 F.3d 717, 745 (3d Cir. 1994). Friedman's manufactured calculations are exactly the type of misleading "junk science" that *Daubert* and its progeny are intended to exclude.

**E. Friedman's "Crash Compatibility" Opinions.**

Friedman's opinions on crash compatibility (*i.e.*, FUPD's) are intertwined with his energy-absorption opinions ("EAFUPD's" and "airbags") and must be excluded for many of the same reasons. He has failed to allege any specific component on the front of the subject vehicle that was defective. He has never identified any specific alternative design. He has not produced any analyses, calculations, testing or other support whatsoever of how an alternative design would have performed in this accident. And he has failed to conduct any risk-utility or economic feasibility analyses to conclude that the subject vehicle was unreasonably dangerous.

Friedman's entire "crash compatibility" argument is based on his unfounded assertion that the Volvo tractor "overrode" the 4Runner. In fact, Friedman's *own illustrations* of the 4Runner frame (the portion of the 4Runner he claims was overridden) plainly show that the frame itself was actually crushed *forward and up* – a manner of deformation not possible if the Volvo tractor actually had overridden the 4Runner. *See* VGNA's Appendix in Support of Motion to Exclude Friedman (Docket #465) at pp. 40-41 (APP 0391-92) His testimony that an override did occur is clearly unreliable, and any testimony regarding FUPD's is both unreliable and irrelevant.

**F. Friedman's Brake Opinions.**

Regarding Friedman's brake deficiency opinion ("The vehicle should have been equipped with a better braking system"), Plaintiffs do not even attempt to explain away the fact that Friedman has never provided any analysis, calculations or explanations of how the subject tractor would have performed in this accident if it had disc brakes instead of drum brakes. Nor have

they tried to explain why Friedman was unwilling to state under oath that drum brakes are defective or unreasonably dangerous. *See* Friedman Depo Tr. (Docket #465) at 348:10-12 (APP 0122). Instead, in their response Plaintiffs simply discuss Friedman's background with brakes in general (without identifying any relevant experience on heavy truck drum brakes or disc brakes), and then simply conclude that his "methodology is sound" because he reviewed a lot of material. *See* Plaintiffs' Response (Docket #561) at p. 30.

Plaintiffs ultimately attempt to couch this as yet another "battle of the experts" issue that should go to the jury. But (lack of any brake defect pleading aside) this is not a dispute involving different conclusions after application of the same methodology. VGNA's experts, Tim Cheek and Steve Werner, actually calculated the theoretical effect of disc brakes in this accident. Friedman did not. In his deposition in January, Friedman was unable to refute Cheek's and Werner's calculations. Three months later, he is still unable to do so. His opinions are neither relevant nor reliable.

### **III. CONCLUSION AND PRAYER**

Keith Friedman's report, testimony and evidence as to VGNA and the Volvo tractor should be excluded because Friedman lacks the proper qualifications; because his opinions do not satisfy the reliability and relevance requirements of FRE 702 and *Daubert*; and because his disclosures were untimely and inadequate.

Respectfully submitted,

HOWRY BREEN & HERMAN, LLP



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**ATTORNEYS FOR DEFENDANT VOLVO  
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**CERTIFICATE OF SERVICE**

I hereby certify that on April 21, 2014, a true and correct copy of the above and foregoing was forwarded to all counsel of record in accordance with the Federal Rules of Civil Procedure by electronic service through the court's ECF system in compliance with Federal Rules of Civil Procedure 5(b)(2)(E) and 5(b)(3).

A handwritten signature in black ink, appearing to read "Randy Howry".

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Randy Howry